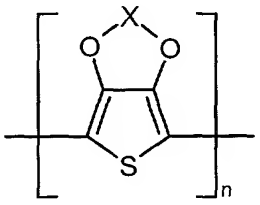
WHAT IS CLAIMED IS:

1. A dispersion comprising polyanions and cationic 3,4-polyalkylenedioxythiophenes, wherein at least about 90% of the particles of the dispersion are less than about 50 nm.

2. The dispersion according to Claim 1, wherein at least about 90% of the particles are less than about 40 nm.

3. The dispersion according to Claim 1, wherein the resistivity of the coatings produced therefrom is at least about 5000 Ωcm.

4. The dispersion according to Claim 1, wherein the 3,4-polyalkylenedioxythiophenes are compounds of the formula (I)



(I),

wherein

n is an integer from 3 to 100, preferably from 4 to 15, and

X is $-(CH_2)_x-CR^1R^2-(CH_2)_y-$, where

R^1 and R^2, independently of one another, are H, an optionally substituted alkyl radical having from 1 to 20 carbon atoms, an aryl radical having from 6 to 14 carbon atoms or $-CH_2-OR^3$, where R^3 is H, alkyl or $-CH_2-CH_2-CH_2-SO_3H$, and

x and y are each, independently of one another, an integer from 0 to 9.

5. The dispersion according to Claim 1, wherein the dispersion is a 3,4-polyethylenedioxythiophene/polystyrene sulfonate dispersion.

6. The dispersion according to Claim 1, wherein the cationic 3,4-polyalkylenedioxythiophene to polyanion have a ratio ranging from between about 1:8 and about 1:25.

7. An electroluminescent arrangement containing a hole-injecting layer, wherein the hole-injecting layer has been produced from a dispersion according to Claim 1.

8. The electroluminescent arrangement according to Claim 7, wherein polyfluorenes and/or poly-para-phenylenevinylenes are used as light-emitting layer.